RUMFORD POWER ASSOCIATES	**)**	**DEPARTMENT**
OXFORD COUNTY	**)**	**FINDINGS OF FACT AND ORDER**
RUMFORD, MAINE	**)**	**AIR EMISSION LICENSE**
A-724-70-A-A/I	**)**	

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Rumford Power Associates (RPA) submitted an application for an initial Part 70 air emission license in November 2001. RPA is a nominally-rated 265 megawatt (MW) electric power plant utilizing a combustion turbine designed to operate on natural gas followed by a heat recovery steam generator (HRSG) to produce superheated steam. RPA is located in the Rumford Industrial Park off Route 108 approximately two miles south of the commercial centers of Rumford and Mexico and one and one-half miles south of the Mead Corporation's Rumford Mill. The facility supplies electricity to the regional grid through an interconnection with Central Maine Power (CMP) transmission lines.

FACILITY	Rumford Power Associates (RPA)
LICENSE NUMBER	A-724-70-A-A/I
LICENSE TYPE	Initial Part 70 License
NAICS CODES	221112
NATURE OF BUSINESS	Electric power generation
FACILITY LOCATION	Rumford, Maine
DATE OF LICENSE ISSUANCE	August 14, 2003
LICENSE EXPIRATION DATE	August 14, 2008

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	**UNIT CAPACITY**	**FUEL TYPE**
Combustion Turbine	1950 MMBtu/hr * (24-hour avg,)	Natural gas
Diesel Fire pump	1.5 MMBtu/hr	Diesel fuel
Water heater	4.5 MMBtu/hr	Natural gas
Standby Generator	8.2 MMBtu/hr	Diesel fuel

* Combustion Turbine unit rating of 1950 MMBtu/hr is based on the higher heating value due to increased fuel burning associated with low ambient air temperatures

RPA has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of RPA's insignificant activities can be found in the Part 70 license application and cross-referenced with Appendix B of Chapter 140 of the Department's Regulations.

C. Revision Description

This initial Part 70 air emissions license includes changes that qualify as minor modifications:

(1) An increase in the maximum licensed firing capacity from 1906 MMBtu/hr to 1950 MMBtu/hr (based on a 24-hour block average). The change does not represent any change in the design of the turbine, but recognizes the increased fuel burning capacity associated with low ambient air temperatures. The licensed design capacity of 1906 MMBtu/hr was based on GE turbine specification at ambient temperature of 15˚F. The lb/hour emission rates have been adjusted to reflect this slight increase in design capacity.

(2) RPA proposes the addition of a 900 kW (8.2 MMBtu/hr) diesel fired generator which also qualifies as a minor revision. The standby generator is included in the application and will be limited to no more than 300 hours of operation per year. The generator will use low sulfur (0.05%) diesel fuel to satisfy the BACT requirement.

(3) RPA requests to remove from the license the two natural gas-fired air intake chillers that were never constructed under the original permit. The two chillers were rated at 22.12 MMBtu/hr each and the impact from those units was included in the air quality impact assessment. The total facility air quality impact will be less when elimination of the chillers is combined with the increase in license capacity and the addition of the standby generator. Therefore the air quality modeling demonstration that was submitted to support the PSD application remains a valid demonstration that the proposed emissions will not cause or contribute to violations of the ambient air quality standards or the PSD increments.

D. Application Classification

The application for RPA does include modifications to the current air emission license. The changes included in the application are considered major depending on whether or not the future allowable emissions are greater than the significant emission levels, as defined in Chapter 100. For RPA, actual emission increases result from the emergency diesel generator installation and the increase in maximum capacity to 1950 (on a 24-hour block average for up to 1200 hours per year), however, no increase in licensed allowed emission limits is requested.

Furthermore, the actual emissions increases are not above significant emission level thresholds. Therefore, the license is considered to be an Initial Part 70 License, along with a minor modification, issued under Chapter 140 of the Department's regulations for a Part 70 source.

II. BEST PRACTICAL TREATMENT

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. Descriptions of the applicable requirements are provided below under the appropriate headings.

Project Description

The generation of electricity by a combined cycle combustion turbine generator set can be described as follows: combustion air enters through the inlet air filters and the inlet air cooler coils, and compressed by the turbine-driven compressor. Fuel and compressed air are mixed and burned in the combustion section of the turbine, creating a high-pressure, hot gas. This gas is then expanded through the three-stage power turbine section where most of its thermal energy is converted to work as it turns the turbine. The turbine drives both the air compressor and the electric generator.

The combustion turbine is a General Electric (GE) product rated at approximately 178 MW at 45°F and 190.5 MW at 15°F, and is designed to operate on natural gas with an original maximum heat input of 1,906 MMBtu/hour. However, Maine's ambient temperatures can often be lower than 15°F during the winter months. RPA has found increased fuel burning associated with low ambient air temperatures, therefore the maximum licensed firing rate capacity will increase from 1906 MMBtu/hr to 1950 MMBtu/hr.

The turbine exhaust is nearly at atmospheric pressure, but is relatively hot at around 1,110°F. Most of this heat will be recovered in the heat recovery steam generator (HRSG) by passing the gas over water and steam-filled tubes to make high pressure steam. The HRSG is a three-pressure, natural circulation, reheat unit with no supplemental fuel firing. Within the HRSG, the exhaust gas passes through a Selective Catalytic Reduction (SCR) unit, with an accompanying ammonia (NH_3) injection grid for further NOx reduction. Exhaust gas leaving the

air pollution control system then exits to the atmosphere through a 150-foot exhaust stack. Steam generated in the HRSG is expanded through a steam turbine generator, providing an additional 93 MW of electricity at 45°F. After extracting all usable heat energy, the steam is sent to the air-cooled condenser, where it condenses and enters the hotwell as a liquid. The condensed steam, which is now referred to as condensate, is pumped back to the HRSG where it is reused as boiler makeup.

B. Emission Units

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT) as defined in Chapter 100 of the Air Regulations. BACT is a top down approach to selecting air emission controls considering economic, environmental and energy impacts.

New Back-up Diesel Generator BACT

The proposed emergency standby generator is a diesel-fired generator rated at 900 kW. To meet the requirements of BACT, the generator will be limited to operate less than 300 hours per year and to operate with low sulfur diesel oil with a maximum sulfur content of 0.05% by weight. The emission estimates provided by Onan show that its use of turbocharged combustion and aftercooling represent good combustion practices. The emissions are comparable to or lower than emissions from other comparable diesel fired generators.

BPT for the Main Turbine Generator

The RPA facility operates a combustion turbine, which consists of the following major mechanical plant components:

- An advanced technology natural gas-fired turbine providing high reliability.
- Advanced dry low nitrogen oxide (DLN) combustor that achieves low nitrogen oxide (NOx) levels without consuming water. This combustor firing natural gas is combined with selective catalytic reduction (SCR).
- High-pressure reheat, superheated steam generation, with high-efficiency, tandem compound turbine for maximum combined cycle efficiency. There will be no auxiliary gas firing of the heat recovery steam generator (HRSG).
- Air (dry)-cooled condenser system which provides for cycle cooling without the need for consuming the large quantities of water and the continuous water vapor plume associated with conventional systems.
- The plant will fire only natural gas fuel, eliminating higher levels of air emissions typically associated with backup oil firing. There is no need to deliver or store fuel oil.

The turbine is subject to New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines, for which construction is commenced after October 3, 1977.

40 CFR Part 60, Subpart GG establishes the following emission limits:
Pursuant to 40 CFR Part 60.333 SO_2 is limited to (a) 0.015% by volume @ 15% O_2 on a dry basis or (b) the fuel sulfur content shall not exceed 0.8% by weight.

Pursuant to 40 CFR Part 60.332(a)(1) NO_x is limited based on the following equation:

NO_x - $STD = 0.0075*(14.4/Y) + F,$

where STD is the allowable NO_x emissions (percent by volume at 15% O_2 and on a dry basis), Y is a function of the manufacturer's rated load (kilojoules per watt hour), and F is a function of the fuel-bound nitrogen.

The NSPS for gas turbines, 40 CFR Part 60 Subpart GG, is currently under review and may undergo revisions to its monitoring requirements. The proposed revisions would remove the requirement to test pipeline natural gas for sulfur content and exempt facilities with NOx CEMS from nitrogen content monitoring. RPA will comply with the revised NSPS when the changes are made final.

BPT Analysis

A thorough BACT analysis for each of the pollutants for each piece of equipment was done during the initial licensing in 1998. The current Chapter 115 air emission license, A-724-71-A-N, provides a detailed description of this BACT analysis. The following BPT analysis summarizes the results of that analysis:

Combustion Turbine
Emissions from the combustion turbine are reduced by controls that were determined to represent best available control technology when the unit was initially licensed in 1998. NOx emissions are controlled using GE's dry low NOx combustor technology in combination with selective catalytic reduction (SCR) to achieve an emission limit of 3.5 ppmvd corrected to 15% O_2. At the time of the permit this emission level represented the lowest limit required on any similar sized source in Maine. The turbine is licensed to fire natural gas only - no supplemental oil firing. Thus emissions of sulfur dioxide are controlled well below what is required of other sources of similar age. Emissions of CO, VOC and particulate matter are minimized by the efficient dry low NOx combustor

design of the turbine and the emission rates are comparable to other similarly sized projects burning natural gas. Thus the emissions from the turbine are being controlled by technologies that represent best practical treatment.

Diesel Fire Pump

The diesel fire pump is limited to low sulfur diesel oil with a maximum sulfur content of 0.05% by weight. Emissions of other pollutants are estimated based on EPA AP-42 "Compilation of Air Pollutant Emission Factors" which are representative of the class of combustor. The combination of low sulfur oil and equipment that was new in 1998 represent best practical treatment.

Water Bath Heater

The water bath heater is a natural gas fired heater with a rated capacity of 4.5 MMBtu/hr. It was licensed on February 23, 2000 as Amendment #1 to RPA initial air emission license. Since the heater combusts only natural gas, its emissions are very low compared to other units of similar size and the emissions were found to represent best available control technology. Thus its current configuration represents best practical treatment at this time.

Streamlining

Opacity

RPA accepts streamlining for opacity requirements. Chapter 101, Section 2(A)2 of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

Based on best management practices and the type of fuel for which the turbine generator was designed, it is unlikely that the turbine will exceed the opacity limits. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing is not required. However, neither the EPA nor the State is precluded from performing its own testing and may take enforcement action for any violations discovered.

Particulate Matter

RPA accepts streamlining for particulate matter requirements. Chapter 105 of the Department's regulations and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

Nitrogen Oxide

The NSPS establishes a nominal NOx emission limit for RPA of 75 ppmdv at 100% load. Subpart GG also limits the fuel sulfur content to no more than 0.8%

by weight. While the NSPS does apply, the proposed BACT is more stringent, therefore, compliance with BACT will insure compliance with the NSPS.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping of fuel use and percent fuel sulfur content by weight. RPA shall combust only natural gas in the turbine generator. Sulfur content monitoring of natural gas shall be done semiannually as approved through an EPA letter dated December 18, 2002. RPA shall meet NSPS 40 CFR Part 60.333 (a) not exceed an SO_2 emission rate of 0.015% by volume @ 15% O_2 on a dry basis, or (b) shall not burn liquid fossil fuel containing over 0.8 percent sulfur by weight as fired in the turbine.

Start-up/Shutdown

RPA's existing air emission license requires that the specified emission limits apply at all times except startup and shutdown. It required RPA to propose to the Department numerical emission limits to be applied during these periods. Such limits shall be based on emission monitoring and/or stack test conducted during startup/shutdown periods. RPA proposes the following numerical limits:

- CO emissions during the periods of startup and shutdown shall not exceed 1000 ppmvd, corrected to 15% O_2 averaged over the duration of the startup/shutdown.
- NOx emissions during the periods of startup and shutdown shall not exceed 90 ppmvd, corrected to 15% O_2 averaged over the duration of the startup/shutdown.

The duration of the startup period is defined in Condition (29) of the Order Section.

Emissions Standards

A. Combustion Turbine

Emissions from the combustion turbine shall not exceed the following limits when firing natural gas in the turbine generator, except during startup/shutdown:

Pollutant	Load	ppmdv	ppmdv avg time	lb/hr	Control Technology
PM	All	--	--	13.7	Natural gas only
PM_{10}	All	--	--	13.7	Natural gas only
SO_2	All	--	--	10.8	Natural gas only (2 gr/100 scf)

NO_x	All	3.5 (corrected to 15% O_2)	24 hr block avg	25.0	DLN Technology & SCR
CO	All	15 (corrected to 15% O_2)	24 hr block avg	53.2	Good Combustion & GE DLN technology
VOC	All	--	--	3.1	Good Combustion control
Ammonia	All	10 (corrected to 15% O_2)	24 hr block avg	26	--

- Compliance with the PM and PM_{10} lb/hour emission limits shall be determined through stack test using EPA Methods 1-5.
- Compliance with the SO_2 lb/hour emission limit shall be demonstrated by firing rate and by fuel sample analysis of the natural gas' sulfur content as required by NSPS Subpart GG.
- Compliance with the NOx, CO, and ammonia ppmdv emission limits shall be demonstrated by the use of continuous emission monitors (CEMs). The NOx, CO, VOC, and ammonia lb/hour emission limits shall be demonstrated through stack testing.
- Compliance with the visible emission limit shall be demonstrated by EPA Method 9.

B. Facility Emissions

Total Allowable Annual Emissions for the Facility
(used to calculate the annual license fee)

Equipment	**PM**	**PM_{10}**	**SO_2**	**NO_X**	**CO**	**VOC**
Gas Turbine	60.0	60.0	46.4	109.5	233.0	13.6
Fire Pump (500 hours/yr)	0.07	0.07	0.01	1.0	0.21	0.08
Water Bath Heater	0.2	0.2	0.1	1.9	1.6	0.1
Generator (300 hours)	0.04	0.04	0.08	3.4	0.10	0.09
TOTALS	**60.3**	**60.3**	**46.6**	**115.8**	**234.9**	**13.9**

III. AMBIENT AIR QUALITY ANALYSIS

The minor modifications requested by RPA will not increase emissions above significance levels. In fact, the actual facility emissions will be less when compared to emissions allowed for through the current air emission license due to the fact that the two 22 MMBtu/hr natural gas fired chillers were never installed. The existing ambient air quality analysis performed for RPA in Air Emission License A-724-71-A-N issued May 7, 1998, which demonstrated compliance with Maine Ambient Air Quality Standards and Class I and Class II Increments, is sufficient for this initial Part 70 Air Emission License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-724-70-A-A/I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to RPA pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Standard Statements

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

(a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

(b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

(c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

(d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

Standard Conditions

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;
Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;
Enforceable by State-only

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:

(i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

(ii) to demonstrate compliance with the applicable emission standards; or

(iii) pursuant to any other requirement of this license to perform stack testing.

(b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(c) submit a written report to the Department within thirty (30) days from date of test completion.

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

(a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

a. The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part

that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

b. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

c. All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

(a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
(b) The compliance status;
(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(e) Such other facts as the Department may require to determine the compliance status of the source;

SPECIFIC CONDITIONS

(14) The following shall apply to the conditions in this order as appropriate, unless it is stated otherwise for such unit [Chapter 140]:

A. A 24-hour block average basis shall be calculated as the arithmetic average of not more than 24 and not less than 8 one (1) hour block average periods. Only one 24-hour block average shall be calculated for one day, beginning at midnight. Any hour that has been impacted by a start-up or shut down shall not be included in the 24-hour block average. This refers to the ppm limits of Condition (16).

B. A 3-hour block average basis shall be calculated at the arithmetic average of not more than 3 one (1) hour block average periods. No more than eight 3-hour block averages shall be calculated for one day. One 3-hour block average shall be calculated for the period from midnight to 3:00 a.m., one from 3:00 a.m. to 6:00 a.m., one from 6:00 a.m. to 9:00 a.m., etc. Any hour that has been impacted by a start-up or shut down shall not be included in the 3-hour block average.

C. A 30-day rolling average basis shall be calculated as the arithmetic average of not more than 30 twenty-four (24) hour block averages, made up of data from 30 consecutive operating days.

D. A 6-minute block average basis shall be calculated as the arithmetic average of 24 consecutive fifteen second block average periods. No more than 10 six-minute block averages shall be calculated for any one-hour period.

(15) Combustion Turbine

A. The combustion turbine shall consist of a combustion turbine followed by a heat recovery steam generator (HRSG).

B. Turbine #1

1. Visible emissions from the turbine shall not exceed 20% opacity, measured as 6-minute block averages, except for one 6-minute block average period per hour of not more than 27% opacity. Compliance with

the opacity standard shall be done in accordance with EPA Reference Method 9 when requested.

2. RPA shall operate a Selective Catalytic Reduction (SCR) system to reduce NOx emissions.
3. The exhaust from the combustion turbine and HRSG shall be vented through a 150 foot above ground level stack.

[MEDEP Chapter 140, BPT]

(16) Emissions from the combustion turbine shall not exceed the following limits when firing natural gas in the turbine generator during all times, except for periods of startup/shutdown times as defined in Condition (29):

Pollutant	Load	ppmdv	ppmdv Avg Time	lb/hr	Control Technology
PM	All	--	--	13.7	Natural gas only
PM_{10}	All	--	--	13.7	Natural gas only
SO_2	All	--	--	10.8	Natural gas only (2gr/100 scf)
NOx	All	3.5 (corrected to 15% O_2)	24 hr block avg	25.0	DLN Technology & SCR
CO	All	15 (corrected to 15% O_2)	24 hr block avg	53.2	Good Combustion
VOC	All	--	--	3.1	Good Combustion control
Ammonia	All	10 (corrected to 15% O_2)	24 hr block avg	26	--

[MEDEP Chapter 140, BPT]

(17) Compliance with the PM and PM_{10} lb/hour emission limits shall be determined through stack test using EPA Methods 1-5. [MEDEP Chapter 140, BPT]

(18) Compliance with the SO_2 lb/hour emission limit shall be demonstrated by firing rate and by fuel sample analysis of the natural gas' sulfur content as required by NSPS Subpart GG. RPA shall comply with the proposed revised NSPS fuel sampling procedures when amended. The license does not need to be reopened to reflect these proposed changes. [40 CFR Part 60, Subpart GG]

(19) RPA is required to operate CEMs and shall meet the following conditions:

(a) Compliance with the NOx, CO, and ammonia ppmdv emission limits shall be demonstrated by the use of continuous emission monitors (CEMs). The monitors shall meet the criteria of the appropriate performance

specification of 40 CFR Part 60 Appendix B&F, and Part 75, appendices A&B. The NOx, CO, and ammonia lb/hour emission limits shall be demonstrated through stack testing upon Department request.

(b) RPA shall monitor and record the following periodic monitors as specified:

Periodic Monitoring for the Combustion turbine	**Monitor**	**Record**
turbine natural gas firing rate	flow meter	Once per hour
electric load level	electronic monitor	Once per shift
turbine air inlet temperature	temp probe	Once per shift
catalyst bed temperature	temp probe	Once per shift

(20) Pursuant to 40 CFR, Part 60, Subpart GG, the Turbine is subject to the following: RPA shall continuously monitor and record the fuel consumption being fired into the turbine on an hourly block average basis. Records shall be maintained according to Condition (8) and 40 CFR Part 60, Subpart GG.
[40 CFR Part 60, Subpart GG]

(21) RPA shall limit emissions from the 4.5 MMBtu/hr natural gas-fired waterbath heater to the following: [MEDEP Chapter 140, BPT]

Pollutant	**lb/MMBtu**	**Emission rate (lb/hour)**
PM	0.12	0.04
PM_{10}	--	0.04
SO_2	--	0.01
NOx	--	0.44
CO	--	0.37
VOC	--	0.03

Compliance with the above emission limits shall be demonstrated by stack testing upon the Department's request. Visible emissions from the water heater shall not exceed 10% opacity on a 6-minute block average.

(22) The emergency standby generator is a diesel fired generator rated at 900 kW (8.2 MMBtu/hr). To meet the requirements of BACT, the generator will be limited to operate less than 300 hours per year and to operate with low sulfur diesel oil with a maximum sulfur content of 0.05% by weight. A log shall be maintained to document hours of operation and fuel receipts be kept to show compliance with %

sulfur content requirement. Emissions from the emergency standby generator shall not exceed the following:

Pollutant	lb/MMBtu	Emission rate * (lb/hour)
PM	0.12	0.23
PM_{10}	--	0.23
SO_2	--	0.53
NOx	--	22.5
CO	--	0.63
VOC	--	0.56

* Compliance with the above emission limits shall be demonstrated by stack testing upon the Department's request.

(23) The emergency diesel fire pump shall be limited in operation to 500 hours per year which will be equipped with a non-resettable elapsed time meter. The generator will operate with low sulfur diesel oil with a maximum sulfur content of 0.05% by weight. RPA shall keep fuel receipts to show compliance with the sulfur content limit. The emergency diesel fire pump shall be operated only during emergency situations that would require the pump to operate to fight a fire at the facility or for maintenance purposes to assure that the system is in working order. [MEDEP Chapter 140, BPT]

(24) Visible emissions from the exhaust of the emergency diesel fire pump and the emergency standby generator, each shall not exceed 20% opacity, measured as 6 minute block averages, except for no more than two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 101]

(25) The facility shall be designed, constructed, and operated consistent with the representation of the facility in the PSD permit application. [MEDEP Chapter 140, BPT]

(26) This facility shall comply with the requirements of the Federal New Source Performance Standards 40 CFR 60, Subparts A (General provisions), and Subpart GG (Stationary Gas Turbines). RPA shall comply with the notification and recordkeeping requirements of 40 CFR Part 60.7. [40 CFR Part 60 Subpart GG]

(27) RPA is subject to the requirements of the Federal Acid Rain Program found in 40 CFR Parts 72 through 78. Compliance with all applicable provisions of these regulations is required. [40 CFR Part 70-78]

(28) RPA shall obtain and hold in the EPA Allowance Management System, sufficient Acid Rain allowances for each ton of SO_2 emitted annually in accordance with the requirements of 40 CFR, Part 72. [40 CFR Part 72]

(29) Turbine Startup/ Shutdown

A. RPA shall minimize emissions from the gas turbines to the maximum extent practicable during startup and shutdown, under maintenance or adjustment conditions, during equipment cleaning conditions, and during initial gas turbine commissioning by following proper operating procedures to minimize the emission of air contaminants to the maximum extent practical. [MEDEP Chapter 140, BPT]

1. Turbine start-up shall be defined as that period of time from initiation of combustion turbine firing until the unit reaches steady state load operation. Steady state operation shall be reached when the combustion turbine reaches 50% base load and the steam turbine is declared available for load changes. Start-up shall be completed as soon as practicable, but in no case shall the period exceed 300 minutes. RPA shall track and record all start-up times and duration. Records on start-ups lasting longer than 240 minutes shall include an explanation of the circumstances that led to the longer start-up.

2. Turbine shutdown shall be defined as that period of time from steady state operation to cessation of combustion turbine firing. This period shall not exceed 60 minutes. RPA shall track and record all shut down times and duration.

3. RPA shall meet the following numerical emission limits during startups:
   - CO emissions during the periods of startup and shutdown shall not exceed 1000 ppmvd, corrected to 15% O_2 averaged over the duration of the startup/shutdown.
   - NOx emissions during the periods of startup and shutdown shall not exceed 90 ppmvd, corrected to 15% O_2 averaged over the duration of the startup/shutdown.

4. Visible emissions from each turbine during start-up and shut down conditions shall not exceed 30% opacity on a six minute block average basis. Compliance shall be demonstrated in accordance with EPA reference Method 9 on a six minute block average, as defined in Condition (14)(D) of this license.

(30) Ammonia will not be injected into the HRSG during start-up or shutdown unless the catalyst bed is at, or above, the manufacturer's specified minimum operation temperature. [MEDEP Chapter 140, BPT]

(31) **Continuous Emission Monitoring System (CEMS)**
The CEMS required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. The licensee shall comply with the following: [MEDEP Chapter 140, BPT]

A. **Performance Specifications**
All CEMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Departments regulations.

1. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations.
2. Develop and maintain an updated quality assurance plan for all CEMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations. RPA may substitute quarterly linearity tests as specified in Part 75 in lieu of Part 60 quarterly CGA. [MEDEP Chapter 117]

B. **Recordkeeping**
For all of the continuous emission monitoring (CEMS) and recording required by this license, the licensee shall maintain records of the most current six-year period and the records shall include:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and [MEDEP Chapter 117]
2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
[MEDEP Chapter 117]

3. For all CEMS, the records shall include:
   a. Documentation that all CEMS are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F; [MEDEP Chapter 117]
   b. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS as required by 40 CFR Part 51 Appendix P; [MEDEP Chapter 117]

C. **Quarterly Reporting**
The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS) required by this license. [MEDEP Chapter 117]

1. All control equipment downtimes and malfunctions;
2. All CEMS downtimes and malfunctions;
3. All periodic monitor downtimes and malfunctions;
4. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
   a. Standard exceeded;
   b. Date, time, and duration of excess event;
   c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
   d. A description of what caused the excess event;
   e. The strategy employed to minimize the excess event; and
   f. The strategy employed to prevent reoccurrence.
5. A report certifying there were no excess emissions, if that is the case.

(32) **Semiannual Reporting**
The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and Jan 31st of each year with the initial semiannual report due January 31, 2004. The postmarked date of the submittal shall be used to determine compliance with the timeliness of the semiannual reporting.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license. This includes but is not limited to the periodic monitoring as required in Condition 19 (c), recordkeeping of fuel use, and the hours of operation for the emergency generator and fire pump.
B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140]

(33) **Annual Compliance Certification**
The licensee shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31st of each year with the initial annual certification

due Jan 31, 2004. The postmarked date of the submittal shall be used to determine compliance with the timeliness of the annual reporting. [MEDEP Chapter 140]

(34) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department;

   or

2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017
Phone: (207) 287-2437

The emission statement must be submitted by September 1.

(35) The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(36) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.

[40 CFR, Part 82, Subpart F]

(37) The licensee is subject to all applicable requirements of 40 CFR Part 68 (Risk Management Plan).

(38) **Certification by a Responsible Official**

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

(39) RPA shall pay the annual air emission license fee within 30 days of May 31st of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

(40) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application November 5, 2001
Date of application acceptance November 16, 2001

Date filed with the Board of Environmental Protection _____

This Order prepared by Edwin L. Cousins, Bureau of Air Quality